

REMARKS

In response to the Office Action dated April 7, 2005, the Applicants respectfully request reconsideration. To further prosecution of this application, each of the issues raised in the Office Action is addressed herein.

Claims 1 to 37, 53 to 56, 61 to 66, 68 to 69, 71 to 92, 95 to 129, 143 to 152, 154 to 157, 166 to 213, 229 to 232, 237 to 242, 244 to 246 and 248 to 309 are pending for examination, of which claims 1, 26, 32, 53, 61, 65, 68, 71, 126, 143, 154, 166, 177, 202, 208, 229, 237, 241, 244, 248 and 306 are independent claims. Claims 1, 26, 53, 177 and 229 are amended herein.

A. Preliminary Matters

Initially, Applicants note that the Examiner fails to clearly and concisely explain his positions for rejecting each of Applicants' independent claims based on the specific features recited in each independent claim. Instead, the Examiner sets forth his rejection of all the 21 pending independent claims in a single brief paragraph found on page 2 of the Office Action. As discussed in detail below, the Examiner completely fails to specifically address the unique features associated with many of Applicants' claims. Accordingly, Applicants respectfully submit that the rejections indicated in the Office Action are improper. Notwithstanding the foregoing, Applicants provide arguments below in support of the patentability of all of the pending claims.

Applicants note that, in connection with the Office Action Summary sheet, there is no indication with respect to the drawings in item 10. Formal drawings were filed in the present application on July 11, 2002. Accordingly, Applicants would appreciate an indication of the status of the drawings.

Also, in connection with items 13 and 14 of the Office Action Summary sheet, there is no acknowledgement of any priority claims in the present application; however, indeed

the present application claims priority to several applications. Accordingly, appropriate acknowledgement for priority claims is respectfully requested.

Finally, Applicants point out that they have not yet received PTO-1449 forms initialed by the Examiner for IDSs previously filed on the following dates:

- August 5, 2002 (first listed reference to Minami)
- May 18, 2004 (first listed reference to Tokunaga)

Applicants would appreciate receiving, at the Examiner's convenience, initialed copies of the PTO-1449 forms to indicate consideration by the Examiner of the cited references listed thereon.

B. Claim Rejections under 35 U.S.C. § 102

On page 2 of the Office Action, claims 1, 26, 32, 53, 61, 65, 68, 71, 126, 143, 154, 166, 177, 202, 208, 229, 237, 241, 244, 248 and 306 were rejected under 35 U.S.C. §102 as allegedly being anticipated by Fan (U.S. Patent No. 5,926,168). Applicants respectfully traverse these rejections.

1. Discussion of Fan

Fan is directed to a remote pointing device that generates a light beam to control the position of a cursor on an interactive computer or television display (Abstract). In this regard, a user points the remote pointing device directly at the display screen, and a cursor appears on the screen at a corresponding position at which the light beam impinges on the display screen (col. 26, lines 4-20). The cursor enables the user to interact with the computer or television by selecting a desired function, e.g. changing a channel, from the display screen. *Id.*

The system described in Fan may extend to other applications, such as a voice-activated cursor for the physically handicapped (col. 27, lines 18-38), a remote touch screen application (col. 28, lines 1-28), or a video game application for use with game guns (col. 28, lines 29-50). All of the applications, however, involve a cursor that appears directly on the display screen. The cursor, in return, permits the user to remotely select or interact with the computer or television (col. 26, lines 4-20).

2. Independent Claims 1 and 177

Applicants' claim 1 is directed to a method of providing illumination in coordination with a display screen. The method includes providing a source of computer application content for display on a display screen; providing an illumination source for illuminating an environment that is related to and beyond the display screen; and coordinating the illumination source to illuminate the environment in relationship to the computer application content on the display screen. Claim 177 is an independent apparatus (system) claim that closely tracks the language of independent method claim 1.

Fan does not disclose or suggest the method and system of Applicants' claims 1 and 177, respectively. In particular, Fan fails to disclose or suggest *illuminating an environment that is related to and beyond the display screen*, as recited in these claims. Rather, Fan merely teaches positioning a cursor on a screen by pointing a remote pointing device directly at the position (col. 2, lines 10-17; col. 25, lines 55-67). Nowhere in the reference does Fan disclose or suggest that the cursor also may provide general ambient illumination in an environment around the display screen. In fact, pointing the device beyond the display screen would negate the entire purpose of Fan; since the user cannot make selections without the cursor being positioned directly on the screen (col. 26, lines 10-19).

Thus, for at least the foregoing reasons, claims 1 and 177 patentably distinguish over Fan and are believed to be in condition for allowance. Therefore, the rejections of claims 1 and 177 under 35 U.S.C. §102 as allegedly being anticipated by Fan should be withdrawn.

Claims 2 to 25 and 178 to 201 depend from one of claims 1 and 177 and are allowable based at least upon their dependency.

3. Independent Claims 26 and 202

Applicants' claim 26 is directed to a method of illumination. The method includes providing an illumination source capable of illuminating an environment with a plurality of colors; providing a control system for controlling the illumination source; and configuring the control system to accept a signal related to content displayed on a display screen. Claim 202 is an independent apparatus (system) claim that closely tracks the language of independent method claim 26.

Fan fails to disclose or suggest any feature relating to illuminating an environment with a plurality of colors, as recited in claims 26 and 202. Rather, Fan merely teaches a light beam that projects a light spot on the display screen (col. 6, lines 46-51; col. 7, lines 1-6). Fan is completely silent with respect to the light beam, or any other light source, being capable of illuminating anything with a plurality of colors. For at least this reason, claims 26 and 202 patentably distinguish over Fan and are in condition for allowance. Therefore, the rejections of these claims as allegedly being anticipated by Fan should be withdrawn.

Claims 27 to 31 and 203 to 207 depend from one of claims 26 and 202 and are allowable based at least upon their dependency.

4. Independent Claims 32 and 208

Applicants' claim 32 is directed to a method of providing a control signal for an illumination system. The method includes providing content for a computer application including a display on a computer screen; providing the control signal adapted to control an illumination system to generate at least one time-varying lighting effect; and coordinating generating the control signal such that the at least one time-varying lighting effect is

coordinated with the content. Claim 208 is an independent apparatus (system) claim that closely tracks the language of independent method claim 32.

Fan fails to disclose or suggest an illumination system that generates at least one time-varying lighting effect, as recited in claims 32 and 208. Rather, Fan merely discloses positioning a cursor on a screen via a light beam, pursuant to a user-generated action or instruction (col. 26, lines 9-11; col. 27, lines 20-26). Fan is completely silent with respect to any time-varying lighting effects. Accordingly, claims 32 and 208 patentably distinguish over Fan and are in condition for allowance.

Claims 33 to 37 and 209 to 213 depend from one of claims 32 and 208 and are allowable based at least upon their dependency.

5. Independent Claims 53 and 229

Applicants' claim 53 is directed to a method of illumination in a virtual reality environment. The method includes providing a display screen for displaying virtual reality content in at least a portion of the virtual reality environment; providing a lighting system for illuminating at least a portion of the virtual reality environment beyond the display screen; and coordinating illumination from the lighting system with the virtual reality content beyond the display screen. Claim 229 is an independent apparatus (system) claim that closely tracks the language of independent method claim 53.

As discussed above in connection with claims 1 and 177, Fan fails to disclose or suggest any feature relating to *illuminating at least a portion of the virtual reality environment beyond the display screen*, as recited in claims 53 and 229. Rather, Fan merely teaches positioning a cursor on a screen by pointing with a light beam directly at the desired position on the display screen (col. 2, lines 10-17; col. 25, lines 55-67). Nowhere in the reference does Fan make any disclosure or suggestion that the light beam also may provide general ambient illumination in an environment around the display screen. Instead, Fan teaches away from the light beam being in any position other than directly on the display

screen (col. 26, lines 10-19). For at least this reason, claims 53 and 229 patentably distinguish over Fan and are in condition for allowance. Therefore, the rejections of claims 53 and 229 as allegedly being anticipated by Fan should be withdrawn.

Claims 54 to 56 and 230 to 232 depend from one of claims 53 and 229 and are allowable based at least upon their dependency.

6. Independent Claims 61 and 237

Applicants' claim 61 is directed to a method of modeling. The method includes providing a computer-based representation of a solid model in a virtual environment. The representation includes a capability for modeling an effect of light illuminating the solid model. The method also includes providing a controller for a light system. The controller is adapted to control the light system to illuminate the solid model in a real environment in correspondence with the modeled effect of the light in the virtual environment. Claim 237 is an independent apparatus (system) claim that closely tracks the language of independent method claim 61.

Fan completely fails to disclose or suggest the method and system recited in claims 61 and 237, respectively. In particular, nowhere in the reference does Fan disclose or suggest a computer-based representation of a solid model in a virtual environment, let alone any of the remaining features recited in these claims. For at least this reason, claims 61 and 237 patentably distinguish over Fan and are in condition for allowance. Therefore, the rejections of claims 61 and 237 as allegedly being anticipated by Fan should be withdrawn.

Claims 62 to 64 and 238 to 240 depend from one of claims 61 and 237 and are allowable based at least upon their dependency.

7. Independent Claims 65 and 241

Applicants' claim 65 is directed to a method of simulating an environment of a real world situation. The method includes establishing a simulated environment corresponding

to an environment of the real world situation; providing a lighting system for illuminating the simulated environment; and controlling the lighting system to illuminate the simulated environment in a manner corresponding to illumination conditions typical of the real world environment. Claim 241 is an independent apparatus (system) claim that closely tracks the language of independent method claim 65.

Fan completely fails to disclose or suggest the method and system recited in claims 65 and 241, respectively. In particular, nowhere in the reference does Fan disclose or suggest a lighting system to illuminate the simulated environment in a manner corresponding to illumination conditions typical of the real world environment. For at least this reason, claims 65 and 241 patentably distinguish over Fan and are in condition for allowance. Therefore, the rejections of claims 65 and 241 as allegedly being anticipated by Fan should be withdrawn.

Claims 66 and 242 depend from claims 65 and 241, respectively, and are allowable based at least upon their dependency.

8. Independent Claims 68 and 244

Applicants' claim 68 is directed to a method of illumination of an environment. The method includes providing a display screen for displaying content of a computer application; providing a lighting system for illuminating an environment of a user of the computer application with multi-color illumination; and providing a surface for receiving the multi-color illumination from the lighting system. The user perceives at least some of the multi-color illumination in the environment. The method also includes coordinating the multi-color illumination of the surface with execution of the content of the computer application. Claim 244 is an independent apparatus (system) claim that closely tracks the language of independent method claim 68.

As discussed above in connection with claims 26 and 202, Fan fails to disclose or suggest any feature relating to illuminating an environment with multi-color illumination, as

recited in claims 68 and 244. Rather, Fan merely teaches a light beam that projects a light spot on the display screen (col. 17, line 64 to col. 18, line 10). Fan is completely silent with respect to any multi-color illumination. For at least this reason, claims 68 and 244 patentably distinguish over Fan and are in condition for allowance.

Claims 69, 245 and 246 depend from one of claims 68 and 244 and are allowable based at least upon their dependency.

9. Independent Claims 71 and 248

Applicants' claim 71 is directed to a method of controlling illumination in an environment of a visual display screen. The method includes providing an illumination source for producing illumination comprising a plurality of colors; obtaining a signal related to content displayed on the display screen; providing a control system for controlling the illumination source; and controlling the illumination source to illuminate the environment in coordination with the content displayed on the display screen. Claim 248 is an independent apparatus (system) claim that closely tracks the language of independent method claim 71.

For reasons similar to those discussed above in connection with claims 26 and 202 (as well as claims 68 and 244), claims 71 and 248 are believed to be in allowable condition. Claims 72 to 92, 95 to 125, and 249 to 305 depend from one of claims 71 and 248 and are allowable based at least upon their dependency.

10. Independent Claims 126 and 306

Applicants' claim 126 is directed to a method of facilitating illumination control. The method includes providing a control system for an illumination source configured to provide variable color light; adapting the control system to receive a signal representative of visual content displayed on a display screen; and adapting the control system to control the illumination source to generate the variable color light in coordination with the visual

content. Claim 306 is an independent apparatus (system) claim that generally tracks the language of independent method claim 126.

For reasons similar to those discussed above in connection with claims 26 and 202 (as well as claims 68 and 244), claims 126 and 306 are believed to be in allowable condition. Claims 127 to 129 and 307 to 309 depend from one of claims 126 and 306 and are allowable based at least upon their dependency.

11. Independent Claim 143

Applicants' claim 143 is directed to a screen for use with a lighting system. The screen includes a frame designed to be placed in proximity to the a user of a computing system, and a material mounted on the frame. The material is arranged to reflect illumination produced by a the lighting system to such that the user of the computing system perceives the illumination in an ambient environment around the computing system.

Fan completely fails to disclose or suggest the system recited in claim 143. In particular, nowhere in the reference does Fan disclose or suggest a material mounted on the frame, much less, the material being *arranged to reflect illumination produced by a lighting system to such that the user of the computing system perceives the illumination in an ambient environment around the computing system*, as in Applicants' claim 143. For at least this reason, claim 143 patentably distinguishes over Fan and is in condition for allowance.

Claims 144 to 152 depend from claim 143 and are allowable based at least upon their dependency.

12. Independent Claim 154

Applicant's claim 154 is directed to a method for visualizing relative locations of virtual objects within a virtual environment. The method includes providing a computing device and generating a virtual environment on the computing device. The virtual environment contains a plurality of virtual objects. The method also includes associating

with at least one of the plurality of virtual objects the illumination from a lighting fixture; and visualizing the relative location of the virtual object by the positioning position of the illumination.

Fan completely fails to disclose or suggest the method recited in claim 154. In particular, nowhere in the reference does Fan disclose or suggest visualizing a relative location, much less the positioning of the illumination in accordance to the visualization of the relative location. For at least this reason, claim 154 patentably distinguish over Fan and is in condition for allowance. The rejections of claim 154 as allegedly being anticipated by Fan should be withdrawn.

Claims 155 to 157 depend from claim 154 and are allowable based at least upon their dependency.

13. Independent Claim 166

Applicant's claim 166 is directed to a method of providing illumination in coordination with display of content on a display screen. The method includes providing a source of displaying computer game content for display on a the display screen; and providing an illumination source for illuminating an environment that is related to the display screen. The illumination source is adapted to generate a plurality of colors. The method also includes providing a control system for controlling the illumination source to provide illumination of a plurality of colors; and coordinating the illumination source to illuminate the environment in relationship to the computer game content on the display screen. The coordination the illumination source uses the control system in response to a signal obtained from the a computer game.

As discussed above in connection with claims 26 and 202, Fan fails to disclose or suggest any feature relating to illuminating an environment with multi-color illumination, as recited in claim 166. Rather, Fan merely teaches a light beam that projects a light spot on the display screen (col. 17, line 64 to col. 18, line 10). Fan is completely silent with respect

to any multi-color illumination. For at least this reason, claim 166 patentably distinguishes over Fan and is in condition for allowance.

Claims 167 to 176 depend from claim 166 and are allowable based at least upon their dependency.

C. Claim Rejections under 35 U.S.C. §103

On page 3 of the Office Action, claims 2 to 25, 27 to 31, 33 to 37, 53 to 56, 62 to 64, 69, 72 to 92, 95 to 125, 127 to 129, 144 to 152, 155 to 157, 167 to 176, 178 to 201, 203 to 207, 209 to 213, 229 to 232, 238 to 240, 242, 245 to 246, 249 to 305 and 307 to 309 were rejected as being allegedly obvious over Fan in view of Husseiny (U.S. Patent No. 5,519,809). Applicants respectfully traverse these rejections.

As discussed above, these claims are allowable based at least on upon their dependencies on claims 1, 26, 32, 53, 61, 65, 68, 71, 126, 143, 154, 166, 177, 202, 208, 229, 237, 241, 244, 248 and 306, respectively. Therefore, the rejections under 35 U.S.C. §103 are believed to be moot. Applicants' reserve the right, however, to discuss in greater detail the rejections under 35 U.S.C. § 103(a) if deemed necessary in the future.

D. Conclusion

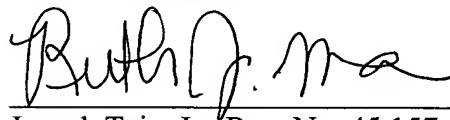
It is respectfully believed that all of the pending claims have been addressed. However, the absence of a reply to a specific rejection, issue or comment set forth in the Office Action does not signify agreement with or concession of that rejection, issue or comment. In addition, because the arguments made above may not be exhaustive, there may be reasons for patentability of any or all pending claims (or other claims) that have not been expressed. Furthermore, nothing in this paper should be construed as an intent to concede any issue with regard to any claim, except as specifically stated in this paper, and the amendment of any claim does not necessarily signify any concession of unpatentability of the claim prior to its amendment.

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In view of the foregoing amendments and remarks, this application should now be in condition for allowance. A notice to this effect is respectfully requested. If the Examiner believes, after this amendment, that the application is not in condition for allowance, the Examiner is requested to call the Applicants' representative at the telephone number indicated below to discuss any outstanding issues relating to the allowability of the application.

If this response is not considered timely filed and if a request for an extension of time is otherwise absent, Applicants hereby request any necessary extension of time. If there is a fee occasioned by this response, including an extension fee, that is not covered by an enclosed check, please charge any deficiency to Deposit Account No. 06-1448, reference CKB-087.01.

Respectfully submitted,



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